



Identifying Barriers and Solutions to Increase Parent-Practitioner Communication in Early Childhood Care and Educational Services: The Development of an Online Communication Application

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Abstract

There is considerable evidence that highlights the importance of family involvement in early childhood education and care (ECEC) on children's development and how when combined with professional involvement has a very positive impact on children's holistic development and therefore, quality ECEC. However, in practice, communicating with families from diverse backgrounds who have limited time, employment obligations, and varying expectations for their child's ECEC has proven to be challenging. To investigate family involvement practices in ECEC services, 18 semi-structured interviews with Irish practitioners and 15 families were conducted. To understand the influence of family involvement on children's development, this study was underpinned by Bronfenbrenner's Bio-ecological framework. The interviews demonstrated that there is a dearth of communication between the home and ECEC services which results in misunderstandings between ECEC stakeholders (practitioners and families). Five barriers to family involvement (attitudinal, structural, cultural, environmental, and welfare) were identified during the interview phase. Subsequently, the development of TeachKloud, a cloud-based management ECEC tool, originated in part, to facilitate quality family involvement practices. TeachKloud was trialled for three months by seven ECEC services and 13 families of children aged 2.8–5.6 years old. A survey was administered after the respective trials to assess the efficacy of TeachKloud in supporting quality practice in ECEC services. This paper focuses on TeachKloud's impact on family involvement. Findings indicate that online technologies such as TeachKloud decrease barriers to family involvement and make children's learning more visible to families, thereby, improving the quality of ECEC provision.

Keywords Educational technology · Family involvement · Quality

Introduction

This paper makes a contribution of knowledge to family involvement practices and the role of technology in home-school communication in early childhood education and care (ECEC). Findings reported in this paper resulted from a study on quality in ECEC with practitioners and parents participating in the Early Childhood Care and Education Scheme (2010) (Pobal 2018) in the southwest of Ireland.

The Scheme provides 3 h of free ECEC every day, over 38 weeks, per year (September–June) for children within the age range of 2.8–5.6 years old. Almost 100% of all registered ECEC services in Ireland participate in the Scheme and are required to implement a developmentally appropriate curriculum (Pobal 2018). The curriculum utilised by the ECEC service must adhere to Ireland's Curriculum Framework, Aistear (National Council for Curriculum and Assessment, NCCA 2009) and the Quality Framework, *Síolta* (The Centre for Early Childhood Development and Education, CECDE 2006) for ECEC (Pobal 2018). The motivation for this paper resulted from the growing interest in technology as a tool to support family involvement (Hernandez et al. 2015).

Technology is quickly emerging as a catalyst for changing the ways in which we think and gather information, as well as how we are educated (Garner and Bond-Raacke 2013; Pitler et al. 2012). Within the context of this study,

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instructional technology is primarily defined as the use of computers, hardware, and/or software to enhance the normal instructional process (Meltzer 2013, p. 4) by making children's learning visible to families. For over a decade, practitioners have used technologies such as video, digital cameras, and other interactive software to document and share children's learning experiences (Alshawi and Alshumaimeri 2017; Reynolds et al. 2014; Crawford 2010; Preston and Mowbray 2008; Carr 2001; Lee et al. 2002). Seemingly, "technology integration into instruction has become a necessity in the current age" (Yavuz and Yanpar Yelken 2016, p. 2143).

There are a variety of communication and management technological applications for ECEC services (i.e. HiMama 2017; EZCare 2017; SmartCare 2017; Alshawi and Alshumaimeri 2017; Olmstead 2013; Jimoyiannis 2012; Blair and Godsall 2006). However, as noted by Higgins and Cherrington (2017), more research is needed on the application and use of technology in ECEC services. Regardless of the medium used, the role of family partnerships, engagement, and communication in quality ECEC services have been emphasised in the literature (Parra et al. 2017; NCCA 2009; CECDE 2006). However, communicating with families from diverse backgrounds who have limited time, employment obligations, and varying educational expectations has proven to be challenging (Yoder and Lopez 2013; Hornby 2011). As a result, this paper examines the strategies practitioners use to involve families, the barriers to family involvement, and the potential of a cloud-based technology in enhancing communication between the home and ECEC service. The literature is replete with studies that convey the positive effects of family involvement on the overall scholastic achievement of children (Yoder and Lopez 2013; Jeynes 2005a, 2005b; Carlisle et al. 2005; Epstein and Sheldon 2002; Epstein 1991; Fan 2001; Bronfenbrenner 1979). Sylva et al. (2004) indicates that the quality of interactions between the parent and child are of greater importance to the child's cognitive development than the parent's qualifications, salary, or job type.

Barriers Affecting Family Involvement

Research indicates that meaningful family involvement stems from a collaborative effort by practitioners, children and their families (Fantuzzo et al. 2013; Whalley et al. 2007; Peters et al. 2007). In a study with just over 5,000 families, parental employment obligations were identified as a key barrier to family involvement (Peters et al. 2007). However, motivation can also be a key factor in families rates of family involvement. For example, Hoover-Dempsey et al. (2005) maintain that families are encouraged to participate in their children's education for two reasons: (1) the family believes that it is their obligation to do so and (2) that their involvement will directly benefit

the child's education. Conversely, families who believe that their child will not benefit from their involvement are less likely to collaborate with practitioners. To combat these barriers, Hornby and Blackwell, (2018) indicate that when educational services take on an active role in reducing the barriers to family involvement, family engagement increases.

Research Design: Theoretical Underpinning

Bronfenbrenner's bio-ecological systems theory (Bronfenbrenner and Pamela 2007) underpinned this study which is founded on the belief that children's development is influenced by the interactions between the child and their primary caregivers (practitioners and families). The Microsystem is the deepest level of Bronfenbrenner's bio-ecological systems theory. The child's relationships with practitioners, their family, and peers affect processes within their immediate environment. Essentially, the Microsystem is where proximal processes function to support development. The next layer is the Mesosystem. It is concerned with the interactions between practitioners, families and the impact of these interactions on the child's development. Additionally, the Mesosystem highlights the importance of fostering strong relationships between practitioners and families to reduce conflict and support well-adjusted young children (Bronfenbrenner and Pamela 2007). The Exosystem is concerned with the connections and relations between two or more settings, one of which does not include the child but indirectly influences the child's development and processes within their primary environment (Bronfenbrenner and Pamela 2007).

As such, the current study sought to understand how specific decisions and processes outside of the child's control could impact on children's opportunities to access and thrive in ECEC (i.e., family involvement). Similarly, the Macrosystem is concerned with the culture and norms of the society in which the child lives and how this may affect processes such as family involvement, interactions between ECEC stakeholders (practitioners and families). Evidently, this bio-ecological systems model relates directly to the child, practitioners and families, culture, policy and ECEC practice. Therefore, these factors must be considered in any investigation of family involvement practices in ECEC. This paper examines children's immediate environments (ECEC service/home), key groups that can influence children's worldviews and experiences (families, practitioners and policy) and the attitudes of Irish society as it relates to our construction of childhood in Ireland. This was achieved by conducting primary research with key stakeholders in the ECEC environment—practitioners and families.

Methodology

The objective of this study was to explore Irish practitioners and parental perspectives on the components that contribute to quality Early Childhood Care and Education (ECEC). This paper focuses on one such component—family involvement. There were two phases in this study. The first sought to investigate practitioners and familial understandings of quality in ECEC. The second phase explored the development and implementation of a cloud-based management system, TeachKloud, in response to the findings from the semi-structured interviews.

Phase 1: Semi-structured Interviews

Owing to differences in stakeholders' perspectives, there has been criticism that definitions of quality ECEC are often generic and vague. Quality is a “constructed concept subjective in nature and based on values, beliefs, and interest, rather than an objective and universal reality” (1994, p. 174). In order to capture the subjective beliefs of practitioners and diverse families, qualitative means were utilised. The rationale for choosing the qualitative semi-structured interview stemmed from its flexibility, in that participants are encouraged to expand on their perspectives (Rubin and Rubin 2005, p. 88). Semi-structured interviews with 18 practitioners and 15 with families of children attending ECEC services were conducted and lasted between 40 and 60 min. An interview schedule (consisting of nine themes) was devised and follow-up questions were included to empower participants to reflect and expand on their responses.

The data was analysed using grounded theory, this approach “is a useful research method for researchers aiming to generate novel theory because it emerges from data gathered and analysed” (Howard-Payne 2016, p. 50). In short, an inductive and comparative approach in the analysis of participant generated data on quality ECEC was utilised (Strauss and Corbin 1998), that is, theory derived directly from the data collected (Birks and Mills 2015). Before and after each interview, the researcher documented significant observations and ideas in a research journal. These observations were compared with secondary research (Drummond and Ryes 2018; Lamb 2013), in order to generate grounded theory, after which, the audio interviews were transcribed. The interview transcripts were read “line by line” (Strauss 1987, p. 28) which enabled the inductive identification of key words and provided the researcher with a broad overview of the transcripts (open coding). These codes were compared and revised over a period of time to aid in the development of core categories.

The snowballing technique (Babbie 2016), whereby, participants refer others with similar training, expertise, or experience in ECEC, was utilised to gain access to families and practitioners that met the selection criteria. Participants could only participate in this study if they were participating in the Early Childhood Care and Education (ECCE) Scheme (2010) (Pobal 2018). The ECCE Scheme (2010) (Pobal 2018) provides Irish children aged 2.8 to 5.6 years old with 3 h of free preschool. Additionally, only practitioners with a minimum of four years of experience and a qualification in ECEC were considered. These interviews demonstrated a need to devise structures and processes to facilitate family involvement and strong relationships between ECEC stakeholders (practitioners and families). In this paper, T1-18 are direct quotes from the practitioners who participated in the interviews, P1-15 for families who participated in the interviews while S1-S13 was used for families who participated in the survey.

Phase 2: TeachKloud Implementation Phase

During the recruitment phase, 15 ECEC service providers were contacted by telephone, using a government list of ECEC registered services (TUSLA 2017). Seven agreed to participate in this phase. After trialling TeachKloud for 3 months, a feedback survey was sent to the ECEC services and their families. The purpose and scope of the present study was explained to the service providers and any questions or queries were addressed and answered immediately. An invitation email was subsequently sent to these services. All of the ECEC services that trialled TeachKloud participated in the feedback survey, and 13 families availing of the ECCE Scheme in these services, provided feedback via the survey.

TeachKloud Development

The practitioner survey consisted of 28 questions, in particular, three questions related to family involvement and TeachKloud, which included: (1) Do you find TeachKloud useful in helping you to communicate with parents? (2) What is the main way that TeachKloud has aided you or will aid you in communicating with parents? (3) How can TeachKloud better aid you in communicating with parents? Similarly, the survey with families posed nine questions, four of which explored the impact of TeachKloud on family involvement. Families were asked to score two statements using a five-point Likert scale: (1) TeachKloud promotes a connection between home and preschool (2) As a parent/guardian, TeachKloud enables me to view my child's development and learning. The final two questions sought further information on the benefits of TeachKloud and

accountability in ECEC services: (3) What do you feel is beneficial about using TeachKloud? (4) Do you feel that TeachKloud makes your child's teacher more accountable?

Ethical Considerations

The EU General Data Protection Regulation (GDPR 2018) was adhered to during the design and implementation of TeachKloud. All participants reserved the right to export or delete their data. Informed consent was obtained from all individual participants included in the study. Those participating in the online survey were assured that their participation was voluntary and they could withdraw from the study at any time. Participants were provided with a consent form and an information sheet which detailed the aim of the study before the study via email and also on the day of the interview. All consent forms were signed and returned to the researcher. Pseudonyms were also used to increase anonymity and protect the privacy of participants in this study. All procedures performed in this study involving human participants were in accordance with the ethical standards of the Cork Institute of Technology research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Results and Discussion

The objective of this study was to explore the perspectives of Irish practitioners and families on the components which contribute to quality Early Childhood Care and Education (ECEC). The importance of family involvement in the provision of quality ECEC was highlighted as a key component during the interview stage with practitioners and families. The interview findings directly influenced the development of a cloud-based early childhood management and parental communication application, TeachKloud. Thus, this section is divided into three parts. The first section presents a discussion and findings on family involvement as it relates to quality practice from the viewpoint of practitioners, while the second focuses on the views of families. Finally, the third section examines the development and impact of TeachKloud on family involvement.

Practitioner Perspectives on Family Involvement in ECEC

Practitioner Values: Family Involvement in ECEC

Practitioners felt that family involvement, especially involvement that is reciprocal and respectful, was critical to quality ECEC, "it has to be a joint approach; we [practitioners and

families of children attending ECEC services] all have to sing from the same hymn sheet...what we do here should be modelled at home and likewise" (T9). Findings indicate that practitioners and families need to have mutual understanding (T9) regarding children's ECEC.

T14: "...with early years services it doesn't necessarily stop at the classroom...To support a child you have to support the family...early years educators are in the perfect position to be a support for families. But its stressful for us too, we are all things to all men, psychologist, counsellor, friend, teacher, the list goes on." (Observation Extract 1)

T14: "we can be the first link...it's almost like [practitioners] first responders because it is in the formative years and if the child has a developmental delay or sometimes the parent has post-natal stress, depression...we're in the position where we can identify and support it. It is also about supporting staff because it can be stressful."

(Observation Extract 2)

T14 suggested that practitioners have a unique role to play in early intervention for families and children. He believed that families may grapple with issues such as post-natal stress/depression and may need support in many areas regarding effective parenting skills. Epstein's 'Model of Parental Involvement' (2001) advocates that supporting families through home-visits, in addition to accessing and providing training programmes that support the health and development of children and families, are all part of the practitioner's role. However, T14 claimed that supporting families with different needs can be emotionally draining and factors such as stress can contribute to practitioner burn-out (Vanover 2016; Essa 2012).

Strategies Used to Involve Families in ECEC Services

There were several strategies identified by practitioners to improve the level of involvement of families in ECEC. The implementation of an open-door policy was the most popular strategy used to involve families in ECEC, while characteristics such as "trust, approachability, and friendliness" (T17) (NCCA 2009; Keen 2007) were also identified as key skills in communicating with families,

T3: "our parents can come in whenever they want; they can take the kids out on their lunch. They are very welcome into the setting at any point...if they have a skill or they know someone with a skill, or they just want to come in today."

(Observation Extract 3)

T13: "we have an open-door policy and it's made aware to parents from day one when they come up for

the enrolment sheet before the child ever starts. They also get the parent handbook which has all the information, policies and procedures...”.

(Observation Extract 4)

An over-reliance on open-door policies may not be enough to facilitate collaborative and meaningful relationships between practitioners and families (Nitecki 2015; NCCA 2009; CECDE 2006; Epstein 1992). The need to incorporate a variety of strategies based on the needs of the family and the child is ever present (Epstein 1992). For instance, parents may be less willing to approach the practitioner if they need help and require the practitioner to take an active role through increased communication and encouragement for a variety of reasons such as a lack of confidence, differing personality styles, or cultural background (NCCA 2009, p. 12).

In addition to the implementation of an open-door policy, practitioners also argued that speaking with parents during “dropping and collecting” (T17) and “knowing each parents name” (NCCA 2009, p. 12) were viewed as effective strategies. Conversely, individual meetings with parents were not seen as a necessity, “we could have meetings but I don’t really need those because I talk to them every morning” (T12). Other strategies, such as taking part in the community on ‘St. Patricks Day’ (T10) and putting on a ‘Christmas Show’ (T7), were also mentioned as key family partnership strategies. In contrast, meaningful partnerships between families and practitioners require targeted strategies (Arthur et al. 2017; NCCA 2009). It has been argued that governmental initiatives that aim to encourage family involvement will be stifled until practitioners are provided with adequate “pre-service and in-service” (Hornby 2011, p. 69) training. Fundamentally, it is imperative that families and practitioners work together to promote learning outcomes in the home and school settings (Wilder 2014; Yoder and Lopez 2013; Jeynes 2005a, b; Carlisle et al. 2005; Epstein and Sheldon 2002; Epstein 1991; Fan 2001; Bronfenbrenner 1979) where families having equal rights and influence in the decision-making process of the ECEC setting (Hallet 2016). One practitioner (T5) noted that sending children’s “work home” (T5) was utilised as a form of family involvement. Williams and Cartledge (1997) maintain that “written communication is probably the most efficient and effective way we can provide valuable ongoing correspondence between school and home” (1997, p. 30).

Regarding the enhancement of communication pathways in ECEC, an interesting shift in the educational landscape is the use of e-portfolios to document, track and collaborate on children’s learning (Oinas et al. 2017; Blair and Godsall 2006). Even with these advancements, various challenges throttle effective family involvement in ECEC. In general, findings indicate that the most common barriers affecting family involvement are language differences,

cultural barriers, time constraints, and diverse expectations for ECEC children and their learning (Hornby 2011; Kim 2009; Hoover-Dempsey et al. 2005; Moles 1993). Other barriers previously discussed in this study include issues affecting families such as mental health and deprivation, practitioner roles and emotional well-being, and stressful work conditions.

Language as a Barrier to Family Involvement

“With a language barrier, it’s harder to communicate with the parents...with the kids too, when they are upset because you don’t know what’s going on.” (T13)

It seems that communicating with families and children whose native tongue is not English may pose a barrier to family involvement (NCCA 2009), “it’s hard when the parent doesn’t speak English because we can’t understand each other and I feel the parent just gives up and we don’t see them anymore” (T1). Cultural and language barriers may reduce the parent’s level of involvement,

the child finds it very hard to communicate and I don’t know is it just English or is there something else there. He does not want to speak to us, he wants to be left alone, maybe its Autism or something of the like. (T15).

Findings suggest that this type of labelling can be extended to specific parents who were described as uncaring by practitioners in this study,

I found that it’s very hard to find parents who want to be involved because at the end of the day, they just need you to take them and they don’t really, really care... (T9).

This home/school disconnect implies that there is even greater need to be attentive to parents who do not speak English. For example, Vera et al. (2012) postulate that,

it is critical for teachers to be educated about the reasons that some parents of English Learner Students (ELS) may be less involved in their children’s schools, such as the cultural differences as opposed to the parent not valuing education (Vera et al. 2012, p. 194).

Diverse Interpretations of ECEC as a Barrier to Family Involvement

Parents have huge expectations of 3-year-olds...and they get very worried...It’s hard because I have to educate the parents and sometimes, they just don’t get it. (T1).

It could be interpreted from the quote above that unrealistic parental expectations can be a barrier to family involvement. That is, the value placed on the acquisition of pre-academic skills by some parents may be in direct opposition to the ECEC services' ethos. Therefore, communicating with, and supporting families in their understanding of the philosophy and values of ECEC (linkages between the home and ECEC service) may be a crucial factor in the development of shared educational ECEC goals, which are vital to positive home-school partnerships (Epstein and Sheldon 2002). In the current study, findings also indicate that positive family relationships are interwoven with the theme of respect, "sometimes I feel like they [parents] don't even hear what I'm saying...I think it's because they don't really want to know or care about what we have to say sometimes" (T17).

T9 describes her experience of the German ECEC system, where families respected practitioner's expertise and professional views on their children's education. She contrasts this to the Irish system where she argues that families "don't turn up" and view ECEC as "babysitting."

The communication between the parents and the staff was great. The parents knew the children were being educated...They respected the profession; they understood the profession. The parents respected you, they valued your opinion...no matter what you try to do it here [in Ireland], how you try to mimic it [the German system] the parents don't turn up. We just have a totally different attitude and system here. It's [ECEC] sometimes viewed more as babysitting. (T9).

Click et al. (2014) concur with the assertion made by T9 and in their view, ECEC is often viewed as "women's work, comparable to babysitting" (2014, p. 212), which contributes to the low status of ECEC in society (Moloney 2015; Click et al. 2014; Van Laere 2014).

Supporting Families

There are a myriad of reasons that affect family involvement, for example, "the effects of poverty manifest themselves in numerous ways, from long working hours... to lack of money for travel preventing families from taking part in cultural activities..." (Teacher Support Network and Parentline Plus 2010). Additionally, employment obligations and time constraints can influence a parent's ability to readily participate in their child's education (Peters et al. 2007; Whalley et al. 2007). It also seems that "time is also massively challenging. We open very early and we close very late, but we still have parents who are running constantly to get here" (T9).

However, the type of strategies used by ECEC services could dissuade families from being involved in their child's education. Findings from the current study indicate that the

onus seemed to be on families to initiate contact, "we always encourage the parents to tell us if they have a worry" (T17). This may be one of the reasons why Pirchio et al. (2013) reminds practitioners that working to understand why some families participate less than others and implementing relevant strategies such as technological communicant tools to increase this participation should be a priority.

Family Values: Family Involvement in ECEC

The interviews with families of children attending ECEC services provided broader understandings of family partnerships and involvement. Family involvement has been shown to be a key component in quality ECEC, and indeed, a major factor in the success of children in their learning journeys (NCCA 2009; Bronfenbrenner 1979). The current study presents evidence that can help in understanding the association between family involvement, partnerships that are reciprocal and their influence on quality practice,

being able to approach the teachers...The support of teachers is huge. They open the door every day, there's a smile. When you come to collect them, there's a story. He did this, he did that. But no matter what you can ring them and text them. (P1)

As discussed previously, this study found that although not necessarily a characteristic of a family involvement programme, families wanted their children's practitioners to be "approachable, warm and loving. You can see from the teachers there that they love the kids...you feel like you can talk to them and voice your concerns" (P12). Moreover, the following extracts from the parental interviews provide emblematic examples of parent's expectations for family involvement practices in ECEC services, "I want to know what's going on with Jack, how he's doing and if there are any problems.... then we can explain things to them and work with them (P12).

Communication and Family Relationships

Although some families expected to have open and respectful dialogue with practitioners, they sometimes found this process difficult, "it is hard to know what's going on, more meetings would help...especially, Jack because everyone can have their input and it joins what goes on in the preschool and what goes on in our house. It's about him [Jack] at the end of the day" (P11). A pervasive theme revolved around the best interests of the child, "it's about if the child and the teacher get on" (P4). A sense of comfort was derived from knowing that children were "comfortable... able to talk to her teachers who will help her when she needs it or feels sad" (P4). It was important for families to know that, "if

there is something wrong the teacher can feel comfortable to talk to me so we can sort it out” (P4). This was vital because “we [families] put a lot of trust in the teachers and so, I feel better when I know that my child at least likes her teachers and they can be there for her when I can’t be” (P4). In common with (Daniel et al. 2016; Wilder 2014; NCCA 2009; CECDE 2006; Bronfenbrenner 1979), findings in the current study suggest that the child thrives when there is harmony between the micro and mesosystem (Bronfenbrenner 1979). These systems are characterised by strong relationships that are founded on two-way communication between the home and ECEC setting. Likewise, findings from the current study suggest that practitioners’ attitudes towards families can promote or discourage family involvement.

Therefore, it may be important that practitioners are trained in family involvement strategies that cater to a diverse range of families and allow for constructive discussions on confronting bias (Malone 2015). Unfortunately, the majority of families did not believe that they were “involved much really, they [practitioners] just work away below in the school. We don’t really know what’s going on below, bar what he [the child] tells us” (P8). Although, the NCCA (2009) promotes equal opportunities for families and practitioners to voice their thoughts, one participant explained that “there isn’t a whole pile of interaction between us and his teachers” (P5). Interestingly, this was seen as a positive for some participants because home-school interactions only seemed to occur for some families when a concern arose, “I’ve never had any problems with them so, I’ve never had to go to them. It’s all very quick, you just drop them you go” (P5). It was also acknowledged by P1 that she felt she was involved and that if there were any issues she knew that the practitioners would consult her, “I know if there were any worries, they’d come to me...not a lot is said but I hope that is positive because they don’t need to say much to me” (P1). However, family involvement goes beyond communicating only when there is a need; partnership is described as parental and practitioner collaboration that is grounded in mutual respect with clear expectations for children’s ECEC (NCCA 2009). Accordingly, families called for more, “parent-teacher meeting[s] to see how things [were] going. I understand there’s a whole load of children in the school and they [practitioners] can’t talk to every parent, every morning. So, it would be a good way to catch up with them, one-one” (P5).

Families of children attending ECEC services, as illuminated by P5, saw the benefit of having one-to-one discussions with practitioners on their child’s growth and development. Parent and practitioner meetings were perceived to be an effective way to understand and contribute to children’s learning while families acknowledged that drop-off times in the morning may be insufficient for thorough discussions between practitioners and families to take place. However,

Latunde (2017) asserts that traditional forms of family involvement strategies such as parent-teacher meetings tend to focus on “what the parent can do for the school” (Latunde 2017, p. 10). Therefore, parent-teacher meetings could be used as an overall family involvement strategy but further opportunities for families to contribute to the decisions made about children’s learning should also be prioritised (Epstein and Sheldon 2002).

Conversely, P2 implies that even though there was minimal communication between the setting and home, she felt that she was involved enough, as she trusted the service, “we’re involved in that we’re kept up to date with what’s happening, sometimes we hear a lot of what’s going on and then other times we hear nothing...but I feel I’m involved enough. I really trust what they’re doing” (P2). Furthermore, P6 valued the collection and drop-off times in the morning and evening; she maintained that this kept her up to date on her child’s learning and development, “I suppose it’s not a massive place so, you would meet them every morning; when you are doing the drop-off and you meet them when you’re doing the pickup and you hear any little bits of information you need to know” (P6).

Barriers to Family Relationships

Findings indicate that families want to be involved in their child’s ECEC but prior commitments and the perceived attitude or willingness of practitioners to involve families hinder this. Families consistently explained that time would be a major challenge with regards to their increasing her rate of participation, “well, I work and I’m a mum as well so time would be the only major issue. I would have no bother going otherwise” (P5) while another parent argued that “if they wanted families to come in during the day, I might not be able to because I’m working and I have another child that I’m minding. The time constraint is the main thing” (P13). It is suggested that ECEC settings may need to be aware of potential barriers to family involvement such as time because “research has shown that parental involvement affected children’s achievement more than school procedures especially in the primary years” (Sheppard 2009, p. 105).

It seems that when these barriers have been identified and overcome by practitioners, families may be encouraged to be proactive in their participation in their child’s education. Additionally, families who were unable to drop or collect their child seemed to feel more alienated or ill-informed about their child’s preschool experiences, “I can’t be there, I wish I could but I can’t pick her up and that’s when the teachers seem to tell you what’s going on...I don’t hear as much as I would like to” (P11). Similarly, P10 explains that “if you’re not dropping and collecting your child, then I think you would feel a little bit less involved, excluded even” (P10). Indeed, the reliance on a limited number of family

involvement strategies may not be the most effective way to meet the needs of a diverse range of families (Malone 2015; Turney and Kao 2009). This indicates that there is a greater need for a two-way line of communication to be established between ECEC settings and the home. With this open line of communication, parents can regularly receive and provide information on their child's learning and be guided by practitioners on how to further children's learning in the home setting (NCCA 2009). These findings are consistent with Davis and Yang (2009) who argues that,

families need information to be partners in their child's education. Brief, regular communication gives them a window into their child's daily school life. If Conversely, we communicate small bits of good news all year long, families feel encouraged and supported, and they are more apt to encourage and support us, as well. (2009, p. 59)

Based on the interviews with practitioners and families, five key barriers to family involvement emerged (Fig. 1). Findings indicate that there are five main barriers to family involvement which can be mitigated through a collaborative effort from practitioners and families who have the child's best interests at heart:

1. *Attitudinal* which relate to practitioner and family perceptions, beliefs and values
2. *Structural* which are any internal or external constructions in the ECCE/home setting including but not limited to a paucity of tools or strategies that promote family-ECCE strategies, partnerships and communication
3. *Cultural* relate to belief systems, ideas, or customs (e.g. parental beliefs or expectations for their child's education that stem from their cultural background etc.)
4. *Environmental* relate to the ECCE environment or the community
5. *Welfare* The well-being of practitioners and parents (e.g. the mental health of individuals within the family and ECEC environment)

Drawing from the interviews with practitioners and parents, some parents felt alienated by the family involvement strategies used in ECCE services. This was especially true for working parents who could not engage in ECCE-led activities, which were often organised during the working hours (structural barrier). Findings indicate that regular two-way communication that enables families of diverse backgrounds to have equitable opportunities to participate is a key component of quality in ECEC. In light of these findings, the following section presents an examination of TeachKloud, a cloud-based management system that was developed to support parents and practitioners in family involvement through increased communication and knowledge-sharing.

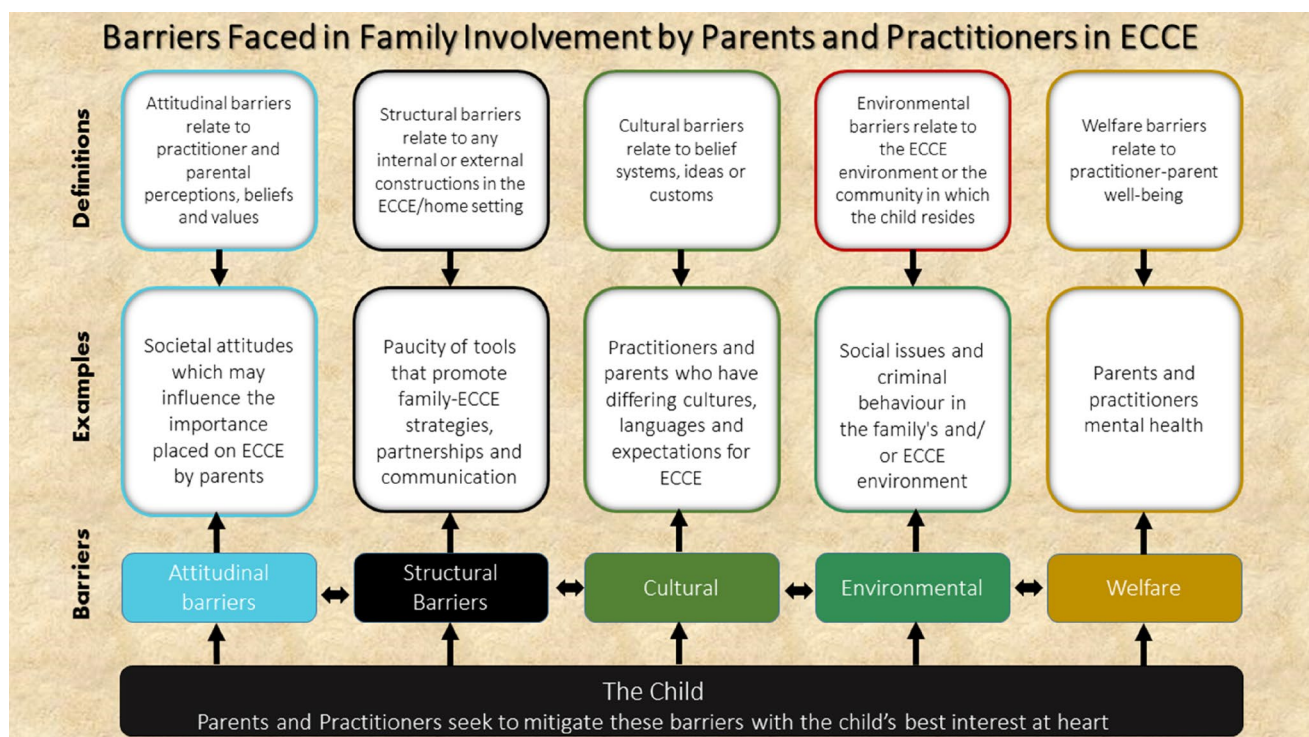


Fig. 1 Barriers faced in family involvement by parents and practitioners in Early Childhood Care and Education (ECCE)

TeachKloud Survey: Communication, Family Relationships and Technology

Findings from the survey with families of children attending ECEC services revealed that these families ($n = 13$) agreed that TeachKloud promotes home-school collaboration. The main benefit for families in using TeachKloud related specifically to making their child's learning visual and accessible. Another popular benefit ($n = 6$) seemed to relate to the role that TeachKloud plays in promoting parent–child communication. This especially related to enhancing communication between families and children regarding the type of learning opportunities and discussions that took place while the child was in pre-school ($n = 5$). In keeping with Epstein's family involvement framework (2001), effective practitioners will offer a variety of strategies to enhance the parent–practitioner relationship. Two strategies proposed by Epstein and Sheldon (2002) include supporting families with their child's learning at home as well as increasing collaboration between families and children. It seems that at a basic level, TeachKloud facilitates this process by enabling families to engage their children in conversation about what and how they learn in their ECEC services. Seemingly, practitioners can support the enhancement of the home learning environment by sharing information on children's learning and development which allows families to build on children's learning while in ECEC. Parents can use this information (video, photographic, and written evidence) to promote discussion within the home.

Another concept explored in the parental survey related to TeachKloud's role in accountability in ECEC. Interestingly, all practitioners ($n = 7$) found TeachKloud useful when communicating with families. It was especially useful for practitioners when at least one adult representative from a child's family were unable to attend face-face meetings. The use of a digital communication tool also seemed to make children's education and care visible to families. This has instilled confidence in families because they believed that in order to create and document 'personalised' learning documentation a great deal of attention by practitioners to children's progress and development was necessary. TeachKloud seems to aid in enhancing foundational connections between the microsystem and mesosystem (Bronfenbrenner and Pamela 2007).

Limitations of the Study

The use of the snowballing technique may also have introduced bias into the data sample. This was diminished by adhering to strict selection criteria as discussed previously.

Essentially, this study provides a snapshot of a small sample of the experiences of families and practitioners about family involvement in Irish ECEC services. Therefore, generalisations to the ECEC sector based on this study may not be feasible. However, this study does provide insights into practitioners' perspectives on the challenges in quality provision.

Conclusion: Implications for Policy and Practice

Findings indicate that communication between practitioners and families was particularly challenging. Although families and practitioners correlated family involvement to positive child outcomes, insufficient family involvement strategies (Epstein and Sheldon 2002) were observed. Indeed, the strategies adopted by practitioners (i.e., open-door policy, brief conversations with families) were found to hinder communication with some families rather than facilitate it because of five main barriers. The barriers identified were grouped into five overarching themes: (1) attitudinal barriers which relate to practitioner and family perceptions, beliefs, and values, (2) structural barriers which are any internal or external constructions in the ECCE/home setting including but not limited to a paucity of tools or strategies that promote family-ECCE strategies, partnerships, and communication, (3) Cultural barriers relate to belief systems, ideas, or customs (e.g., parental beliefs or expectations for their child's education that stem from their cultural background etc.), (4) Environmental barriers relate to the ECCE environment or the community in which the child resides, and (5) welfare barriers relate to practitioner–parent well-being.

Fundamentally, in order to overcome the barriers described in this paper, consultation between all ECEC stakeholders is paramount. Notably, pre-service and in-service training should be accessible and equip practitioners with evidence-based family involvement strategies. It is clear, however, that the potential for digital applications such as TeachKloud to aid in the enhancement of family involvement practices in ECEC is positive.

Therefore, it is recommended that further research is conducted to assess the efficacy of tools such as TeachKloud on structural barriers, particularly in the enhancement family-school communication, engagement and partnership. Results from this study suggest that family involvement is not just about what families can do for the school but it is rooted in meaningful relationships where both parties are valued. However, the anthesis for meaningful relationships to occur seems to be founded upon effective two-way communication where the views and thoughts of each parent is respected.

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